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ABSTRACT

Relationships among reasons for referral to special education, psychoeducational assessment results, and individualized education programs (IEPs) were investigated for 405 special education students (preschool through grade 12). Students' files were reviewed, and referral information, psychoeducational assessment information, and IEP content were coded on checklists. Tenuous relationships existed between reasons for referral and psychoeducational assessment results. Present level and annual goal components of the IEP were related to psychoeducational assessment results. Assessment results were not associated with present level statements and annual goals with a high degree of regularity. Present level statements and annual goals were related to one another in 71% of the instructional areas. Relationships between most IEP components and a special education program prototype were demonstrated, although most present level statements were not significantly related to program prototype. It was concluded that relationships between reason for referral and assessment result require strengthening, as should relationships between psychoeducational assessment results and the content of IEPs. (CL)

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A DATA BASE FOR IMPLEMENTATION OF THE INDIVIDUALIZED EDUCATION PROGRAM

Presented at the
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INTRODUCTION

Educational policy influences practice through the daily activities of those organizational members responsible for implementing it. Educational policy is comprehensively represented in the All Handicapped Children Act of 1975. Dominant policy themes of this act include Due Process, Procedural Safeguards, Protection in the Evaluation Process (PEP), placement of handicapped students in the Least Restrictive Environment (LRE), and the Individualized Education Program (IEP). Due Process is a legalistic theme which requires informed parental consent to performance at several junctures within the special education (SPED) referral, planning, and placement process. Intended to minimize discriminatory practices, PEP requires close attention to measurement limitations and decision criteria within the SPED referral, planning, and placement process. LRE requires student placement which maximizes opportunities for learning through interaction with "normal" students while simultaneously providing specially designed instruction responsive to the student's unique needs. Developed in a meeting by a team, the IEP describes the specially designed instruction and related services to be provided in response to the unique needs of each handcapped student. When viewed from the context of the

special education referral planning and placement process it is clear that the IEP is the central, pivotal mechanism. It orchestrates the specification of student need based upon assessment results and the provision of specially designed instruction which responds to the specified needs.

Evaluative criteria for the process by which IEPs are developed and for the quality of the IEPs have been developed (Morra, 1978). All evaluative criteria reflect the conviction that useful IEPs result from the procedures employed in the referral, planning and placement process.

A policy clarification paper on IEP requirements (DAS Information Bulletin #64, May 1980) and a recent interpretation of IEP requirements (Federal Register, January 19, 1981) articulate the principle of internal consistency. These clarifications and interpretations reinforce the importance of a relationship between assessment results and the content of present level statements; and they require an identifiable relationship among present level statements, short-term instructional objectives, and annual goals. Areas of unique student need should be reflected in present level statements, objectives, goals, and the special education-related services to be provided.

Unique needs experienced by handicapped students are identified initially through a multi-disciplinary assessment process. Employed to understand the performance of referred students, the assessment procedures include observations, clinical judgement, and structured interviews. Initial

assessment procedures should acquire information related to the reason(s) a student was referred for special education consideration. Eligibility decisions, instructional decisions and placement decisions often are based upon assessment results. Because assessment results provide the basis for such important decisions, the selection of instruments and procedures represents a critical decision point. As one means for reducing assessment bias, educators should "operationally specify the criteria to be used in decision making" (Duffy et al., 1981).

Implementation problems related to the IEP and the special education referral, planning and placement process have been identified by many educators. Junkula (1977) presents data which suggest that placement decisions are based upon premature judgments and insufficient attention to available information. "In this study, the only pupil variables that related significantly with any magnitude to the CET placement decisions were the pupil's WISC-IQ's. The assessment contributions of the teacher members of the CET's were not clearly visible in the team's final placement decisions". Contributions of professional role to group decision making in a simulated pupil planning team setting were investigated by Semmel and others (1978). Their results indicate that "special education teachers significantly influenced the group decisions on educational program variables such as concept learning, sensory motor needs, reading, and language development". However, psychologists and administrative personnel were most

influential in placement decisions.

These results (Junkula, 1977, and Semmel et al., 1978) suggest that placement decisions may be predicated upon considerations other than instructionally relevant indices of student need. It may be that a student's special needs have not been operationally defined prior to the placement decision. In fact, it may be that "reversal in the sequence of events (in which the setting of goals and objectives follows a tentative placement decision instead of preceding it) is a product of school personnel basing placement and, therefore, instructional decisions on the availability of services" (Marver and David, 1978) rather than on student need.

Results of a National Survey on IEPs indicated that "a little more than one-third of the IEP's contained all of the 11 information items that the Act requires" and that "just over one-third of all IEP's had all three of the mandated personnel categories (teachers, LEA administrative representatives, and parents or guardians) listed as participants" (Research Triangle Institute, 1980). Five percent of those IEPs surveyed were considered to be exceptionally informative and internally consistent.

"Internal consistency" refers to an identifiable relationship among the reason(s) for referral, content of the psychoeducational assessment, and content of the individualized education program. An identifiable relationship between present level statements, short-term instructional objectives, annual goals and program placement exists within an internally

consistent IEP. A coordinated and integrated referral, planning, and placement process contributes to an internally consistent individualized education program. An internally ccnsistent SPED process and IEP product increases the capacity of a system to provide specially designed instruction which responds to the unique needs of each of its handicapped students. An internally consistent IEP identifies (1) those areas of student need which require specially designed instruction, (2) the level(s) at which to initiate instruction, (3) the anticipated outcome(s) of specially designed instruction and (4) the program within which specially designed instruction is to be provided.

Implementation of the IEP is far more complicated than was initially anticipated. Safer and her colleagues (1978) conclude that "even the most highly motivated teachers cannot implement the IEP without great personal sacrifice unless carefully planned administrative support is available at the district level." Cognizant of these problems, an effort to facilitate implementation of the IEP as a placement, instructional and planning tool was initiated (Dickson, 1979).

As a placement tool, the IEP can be used to manage the provision of special education and related services in response to the identified needs of each handicapped student. Instructionally relevant student needs become operationalized through present level statements, annual goals, and student strengths/weaknesses considerations. Present level statements identify areas requiring specially designed instruction. Annual

goals identify the magnitude of change anticipated given the provision of specially designed instruction for one year. Based upon these instructionally relevant indices of student need, the most responsive program prototype and personnel are selected.

As an instructional tool, the IEP can provide focus for special educators and related service personnel. When present level statements are presented with accuracy, reliability, and in relevant terms, a special educator knows the level(s) at which to initiate instruction. When special educators are convinced of the propriety and legitimacy of annual goals and related intermediate instructional objectives, they become standards against which to measure student progress.

As a planning tool, the IEP may provide the data base for resource requisition/reallocation, inservice education, and organizational change. Students' needs and performance in relation to short-term objectives and annual goals may be aggregated across special education program prototypes and school organizational patterns.

Concept papers which describe conditions essential to implementation of the IEP as a placement tool (Tracey and Pappas, 1980), as an instructional tool (Cawley, 1979), and as a planning tool (Gillespie-Silver, 1979) were written. A data-based decision-making model was used to initiate change at the local school district and individual professional levels. Within this model, data were collected from parents, professionals, and written documents. Data collection

procedures included observations of meetings, structured interviews, open-ended questionnaires, and analyses of written documents.

Steering committees were organized in each participating school district. Committee members developed expectations of utilitarian IEPs through the concept papers. The actual usefulness of IEP's was reflected through data collected within the school district. Selected data were presented and, with some assistance, the steering committees identified areas in need of change at the district level and the professional/parent role level. The need for and focus of consultation and inservice education were identified with groups of professionals. Consultation and inservice education were provided in a manner consistent with self-identified needs at the school district and individual levels. Data reported in this paper were collected in support of this IEP implementation effort.

This paper investigates relationships among referral reasons for special education consideration, psychoeducational assessment results, and IEPs. Additionally, relationships among components of the IEP including present level of performance statements, annual goals, short-term instructional objectives, and program placement were investigated.

METHODOLOGY

Three small New England school districts enrolling 697 handicapped students participated in the IEP Implementation Project. A stratified representative sampling procedure was used to select 405 handicapped students. Class rosters for students receiving special education were acquired from the three Special Education Supervisors. Students were assigned to strata based upon program prototype (i.e., resource, self-contained, out-of-district) and organizational pattern of the school in which the program was located (pre-school, elementary, junior high, senior high, out-of-district).

Use of this representative sampling procedure resulted in selection of 53% of the students in resource programs, 65% of the students enrolled in self-contained programs, and 65% of the students enrolled in out-of-district programs. The stratified representative sampling procedure was employed so that a profile of referral, psychoeducational assessment and IEP information could be constructed and shared with each special educator in the districts.

Participating districts employed different school organization patterns. At the secondary level, one school district had a combined junior-senior high school which enrolled students in grades 7 through 12. Another school district was organized as middle, junior high, and senior high schools enrolling students in grades seven through twelve. The third school district organized itself into junior and senior

high schools enrolling students in grades seven through twelve.

For this paper, students between three and six years of age enrolled in a distinctive special education program were identified as "preschool." Those schools which enrolled students in grades kindergarten through six were designated as "elementary." Schools which enrolled students in grades seven through nine were designated "junior high;" schools which enrolled students in grades ten through twelve were designated "senior high." This sampling matrix is presented in Table 1.

INSERT TABLE 1 HERE

All written information related to the special education of these students was filed in the District Special Education Office. Each student file was carefully reviewed. Referral information, psychoeducational assessment information, and IEP content was coded on checklists. The IEP checklist used in this study is similar to the instrument employed in a national survey of IEPs (Research Triangle Institute, 1978). Psychoeducational assessment and referral information checklists were developed for use in this study.

The content of each checklist was reviewed by an information management specialist, two Professors of Special Education, and two Special Education Supervisors. Checklists

Table I
Representative Sampling Matrix

	Resource	Self-contained	Out-of-district	Total
Sr. High School 10, 11, 12	66/125 (53%)	16/24 (66%)		82/149 (55%)
Jr. High School 7, 8, 9	30/50 (60%)	33/44 (75%)		63/94 (67%)
Elementary	128/247 (52%)	63/114 (55%)	49/71 (69%)	191/361 (53%)
Preschool		20/22 (91%)		20/22 (91%)
Total	224/422 (53%)	132/204 (65%)	49/71 (69%)	405/697 (58%)

were employed on a pilot test basis in a non-participant school district. Each checklist was revised in a manner consistent with results of the professional review and pilot test. As they were used in this investigation, the referral checklist contained 307 items, the psychoeducational assessment checklist contained 282 items, and the IEP checklist contained 597 items. When data were present, an entry was made for the item on the appropriate checklist.

The following categories of instruction remained constant across the three checklists:

1. Reading
2. Mathematics
3. Science
4. Social science
5. General academic
6. Social adaptation
7. Self-help skills
8. Emotional/behavioral
9. Physical education
10. Motor skills
11. Speech
12. Visual acuity
13. Hearing
14. Vocational/prevocational
15. Other

In addition to its conventional connotation, the "reading" instructional area included oral and written expression and

spelling. "Social adaptation" included participation, compliance, and conformity. The "emotional/behavioral" instructional area included interpersonal relationships, behavior or feelings, and moods of unhappiness or depression. The category labeled "other" contained entries which varied among checklists. The referral checklist contained entries such as information processing and developmental delays while those on the IEP checklist contained some of those entries and additional entries such as "parent involvement" and "attention span."

Full-time graduate students in special education and special educators on maternity leave were employed as data collectors. Training for data collectors included a thorough review of checklist contents, a review of information to be entered in specific locations, and trial use of the checklists. Training was continued until a high degree of reliability was established among data collectors.

During the second project year, the special education files on 24 students were reviewed and information was coded by two different data collectors. From a two-by-two contingency table, an inter-rater reliability coefficient of .875 was demonstrated across the three checklists. A 95% level of agreement between raters was reached on referral checklists, a 94% level of agreement on assessment checklists, and a 95% level of agreement on IEP checklists.

Referral information, psychoeducational assessment reports, and IEPs were located in the SPED supervisor's

offices. Each data collector received the names of students receiving special education. Student files were consulted and available referral, assessment and IEP information was reviewed. The most recent assessment and IEP information was coded on checklists. Table 2 presents the sampling matrix with the number of cases actually available for review and analysis.

INSERT TABLE 2 HERE

Referral information was available for review in 238 of the 405 cases. The availability of referral information for individual students was related to the initial referral source, the length of time a student had been enrolled in special education, and the information management system employed by the school district. Information frequently was not available for students referred by out-of-district agencies and for referrals initiated by Child Find. Information often was not available for those students who have been enrolled in special education programs for more than four years. Clearly delineated procedures and consistently assigned responsibilities contribute to the maintenance of referral information.

Assessment information was available for review in 390 of the 405 cases. The availability of assessment information

Table II
Representative Sampling Matrix
Controlling for Available Data

	Resource			Self-Contained			Out-of-District			TOTAL		
	Referral	Assessment	IEP	Referral	Assessment	IEP	Referral	Assessment	IEP	Referral	Assessment	IEP
Senior High School	44/66	61/66	56/66	0/16	14/16	13/16				44/82	75/82	72/82
Junior High School	24/30	30/30	29/30	11/33	33/33	31/33				35/63	63/63	60/63
Elementary School	96/128	125/128	124/128	29/63	60/63	59/63				124/191	185/191	187/191
Pre-school				13/20	18/20	17/20				13/20	18/20	19/20
TOTAL	163/224	216/224	215/224	53/132	125/132	124/132	21/49	49/49	48/49	238/405	390/405	377/405

seems related to the management information system employed by the district. IEP information was available for review in 377 of 405 cases. The availability of IEPs was related to the accuracy of class rosters provided by SPED supervisors and to the geographic mobility of families. The total number of cases utilized for various calculations varied in relation to the student information available for review.

RESULTS

Checklist data were analyzed to identify the presence of relationships between:

1. Reasons for referral and psychoeducational assessment results
2. Assessment results and the content of individualized education programs
3. Internal consistency within individualized education programs as reflected in relationships between:
   (a) present level statements and annual goals which include a logical statement of expected behavior to an accepted standard
   (b) all short-term objectives and short term objectives which represent sequential increments between present level statements and annual goals
4. Content of individualized education programs and

special education program prototype (resource, self-contained, out-of-district)

5. Content of individualized education programs and school organizational pattern (preschool, elementary, junior high, senior high, out-of-district)

Exploration of these relationships was conducted within those instructional areas around which the three checklists were organized. Where the data satisfied statistical assumptions, Chi-square values and contingency coefficients were calculated and are reported. Coefficients reported in Tables 1, 2, 3, and 4 were derived from two-by-two contingency tables. Coefficients reported in Table 5 were derived from two-by-three contingency tables. Coefficients reported in Table 6 were derived from two-by-six contingency tables.

Tenuous relationships existed between reasons for referral and psychoeducational assessment results. Present level and annual goal components of the individualized education program are related to psychoeducational assessment results. Assessment results were not associated with present level statements and annual goals with a high degree of regularity.

A relationship exists between present level statements and annual goals. Present level statements and annual goals are related to one another in 71% of the instructional areas. A relationship between all annual goals and annual goals which include a logical statement of expected behavior to an acceptable standard (LSEBAS) was present. Fifty-seven percent

of all annual goals include the LSEBAS characterisitic.

A significant relationship exists between all short-term objectives and short-term objectives which represent sequential increments between present level statements and annual goals. However, it should be noted that only 37% of all objectives represented sequential increments.

Relationships between most IEP components and a special education program prototype were demonstrated. The lack of significant relationships between most present level statements and program prototype represents a notable exception. Generally, the frequency and quality of short-term objectives increased with the intensity of the program prototype. The frequency with which required components were not present in IEPs may be viewed as problematic.

Relationships between most IEP components and school organizational patterns were present. Math, self-help skills, emotional/behavioral, motor skills, and speech were the instructional areas within which significant relationships were most frequently demonstrated. It should be noted, however, that these relationships were of relatively low intensity.

Many low-level relationships are demonstrated in analyses which follow. Indeed, the manner in which instructionally useful information is derived and the paucity of instructionally meaningful information in IEPs foster serious reservations about the utility of these individualized education programs.

Internal consistency within the IEP development

process,relationships between psychoeducational assessment results, the reasons for referral, and content of individualized education programs are presented in Table 3. No entries appear in those areas for which insufficient referrals and assessment results were reported.

INSERT TABLE 3 HERE

Statistically significant relationships between psychoeducational assessment results and reasons for referral exist in the following instructional areas: speech, social adaptation, motor skills, emotional/behavioral, and general academic. With the possible exception of speech, contingency coefficients suggest the presence of fairly tenuous relationships. No significant relationships exist within the reading and math areas.

Referrals for special education consideration were initiated most frequently within the areas of reading (119), emotional/behavioral (96), general academic (77), motor skills (59), and math (40). Assessment results were reported most frequently in the reading (208), math (154), emotional/behavioral (131), motor skills (115), and general academic (93) areas. General academic (37), emotional/behavioral (32), and motor skills (19) areas were those within which referrals were

initiated most frequently yet assessments yet were reported least frequently.

The absence of significant relationships in reading and math are a function of the disproportionate amount of assessment information collected in these areas. For every student referred with a reading problem, two students are assessed in reading. For every student referred with a math problem, four students are assessed in math. These students appear to receive assessments within the areas of reading and math irrespective of the reason(s) for which they were referred.

In these 234 cases, referrals were initiated in 497 instructional areas, and assessment results were reported in 870 different instructional areas. Referrals were initiated in 157 instructional areas for which assessment results were not reported. Assessment results were reported in 530 instructional areas for which referrals were not initiated, and in 340 instructional areas in which referrals were initiated.

Questionable testing practices exist when assessments are performed in areas which have not been described as problematic and/or assessments are not performed in areas which have been described as problematic. Questionable testing practices appear evident in these 234 cases. Alternatively, it may be that assessments were performed in all areas for which a student was referred and the results were not maintained in the student's file. Should the second explanation be accurate, overtesting exists.

Relationships exist between psychoeducational assessment results and the present level and annual goal components of the IEP. The relationship between assessment results and short-term objectives is less clearly established.

Present level statements seemed to be based upon assessment results in 725 instructional areas. Present level statements in reading (276) and math (145) were related to assessment results most frequently.

Assessment results reported in 548 instructional areas were not used in stating present levels of performance. Assessment results in emotional/behavioral (121), motor skills (104) and general academic (103) areas most frequently were not used in relation to present level statements.

Present level statements in 254 instructional areas were written without an identifiable assessment base. In the absence of an identifiable assessment base, present level statements were written most frequently in the following areas: mathematics (61), general academic (42), reading (37), motor skills (29), emotional/behavioral (27), and self-help skills (26).

Annual goals appeared to be based upon assessment results in 565 instructional areas. Annual goals seem related to assessment results most frequently in reading (228) and math (165). Goals were stated in 174 instructional areas in the absence of an assessment base. Math (57), reading (30), and general academic (24) areas most frequently included annual

goals without an assessment base.

Assessment results were not used as a basis for annual goals in 709 instructional areas. Emotional/behavioral (143), motor skills (126), and general academic (114) areas most frequently contained assessment information without an annual goal.

Relationships between assessment results and short-term objectives were demonstrated in the speech, motor skills, self-help skills, and emotional/behavioral instructional areas. No significant relationships were demonstrated between assessment results and objectives within the reading, mathematics, general academic, and social adaptation areas.

Short-term objectives with an assessment base were present in 543 instructional areas. Objectives were present in 263 instructional areas without an assessment base. Assessment results were not related to short-term objectives in 805 instructional areas.

INTERNAL CONSISTENCY WITHIN THE IEP

Identifiable relationships among present level statements, annual goals, and short-term objectives are required by recent Federal policy interpretations. If present level statements and annual goals are to be used as instructionally relevant indices of student need, their relationship to one another is of importance. If annual goals and short-term objectives are

to be used as standards against which to measure student progress, their relationship to one another is important. To be used as performance standards, annual goals should include a logical statement of expected behavior to an acceptable standard (LSEBAS). The relationships among present level statements, annual goals, and short-term objectives are presented in Table 4.

INSERT TABLE 4 HERE

Relationships between present level statements and annual goals existed within all instructional areas for which statistical assumptions could be satisfied. These 377 IEPs included present level statements in 1138 instructional areas and annual goals in 1076 instructional areas. Present level statements were written most frequently in the areas of reading (318), mathematics (254), motor skills (117) and emotional/behavioral (101). Annual goals were written most frequently in the areas of reading (300), mathematics (207), emotional/behavioral (108) and motor skills (105). These instructional areas account for 69% of the present level statements and 67% of the annual goals.

The inclusion of a present level statement within an instructional area does not insure the presence of an annual

goal within the same area. Conversely, the presence of an annual goal does not insure the presence of a present level statement within the same instructional area. Present level statements in 350 instructional areas did not have an annual goal and annual goals in 288 instructional areas did not have a present level statement. The IEPs are internally consistent within the present level statement annual goal dimension in 71% of the instructional areas. IEPs are most often internally consistent in the area of reading (89%) and least often internally consistent in the motor skills area (65%).

The relationship between annual goals and goals which included a logical statement of expected behavior to an acceptable standard (LSEBAS) within these instructional areas is identified in Table 4. A logical statement of expected behavior to an acceptable standard appeared most frequently in goals within the reading area (72%) and least frequently in goals within the emotional/behavioral area (32%). Goals which included the LSEBAS feature were not present in sufficient numbers within the general academic, social adaptation, speech and vocational/prevocational areas to warrant calculations.

Significant relationships existed between all short-term objectives and those objectives which represent sequential increments between present level statements and annual goals within those instructional areas presented in Table 4. These 377 IEPs included short-term objectives in 954 areas of instruction. Objectives most frequently were written in reading (271), mathematics (191), other (104), motor skills

(84), emotional/behavioral (69) and speech (47). These instructional areas included 80% of all short-term objectives.

Thirty-nine percent of the objectives in the aforementioned areas represented sequential increments between present level statements and annual goals. Objectives most frequently included sequential increments in speech (55%) and least frequently represented sequential increments in the emotional/behavioral area (23%).

THE IEP AND PROGRAM PROTOTYPE

The individualized education program includes: present level statements, annual goals, short-term instructional objectives, a SPED placement recommendation including related services and a placement rationale, the location of SPED and related services, SPED initiation and anticipated duration dates, the extent of participation in regular classes, objective criteria, and procedures and schedules for determining the extent to which short-term instructional objectives are being met. The relationships between these IEP components and the SPED program placement prototype (resource, self-contained, out-of-district) are presented in Table 5.

INSERT TABLE 5 HERE

Placement recommendations appeared in 94% of the IEPs reviewed; no significant relationship was noted between placement recommendations and program prototype.

A placement rationale was present in 39% of the IEPs reviewed; a significant relationship between placement rationale and program prototype was noted, $X2(4)=13.370$, $p<.01$, $C=.3249$. A rationale for out-of-district placements was most frequently present (56%).

The location of special education and related services was identified in 53% of the IEPs. Placement location and program prototype were significantly related, $X2(4)=44.518$, $p<.001$, $C=.3249$. The location of placements was identified most frequently (85%) for out-of-district placements.

Program initiation dates were present in 89% of the IEPs, but no significant relationship between the inclusion of initiation dates and program prototype was noted. The anticipated duration of a program placement was stated clearly in 74% of the IEPs; a significant relationship between the anticipated duration of a program placement and program prototype was noted, $X2(8)=61.546$, $p<.001$, $C=.3746$. In descending order of frequency, the anticipated duration of program placement was presented for resource (83.3%), self-contained (65.6%), and out-of-district (50%) programs.

Related services were least frequently identified in 35% of the IEPs; a significant relationship between identification

of related services and program prototype exists, $X2(2)=8.646$, $p<.01$, $C=.1497$. Related services were identified in the IEPs of out-of-district placements (17%).

The extent of participation in regular classes was identified in 20% of the IEPs; a significant relationship between regular class participation and program prototype exists, $X2(2)=27.379$, $p<.001$, $C=.2624$. IEPs of resource placements (30%) most frequently identified the extent of participation in regular classes. Note that IEPs of 148 students enrolled in resource programs did not include a description of participation in regular classes.

A significant relationship exists between present level statements within the emotional/behavioral area and program prototype. IEPs for 60% of the out-of-district placements include present level statements in the emotional/behavioral area. IEPs for 17% of the resource placements include present level statements in the emotional/behavioral area.

Present level statements were included in 11% of the IEPs in the self-help skills area; a significant relationship between present level statements and program prototype exists in this area. IEPs for 31% of the out-of-district placements included present level statements in the self-help skills area.

Present level statements were included in 10% of the IEPs within the speech area; a significant relationship between such present level statements and program prototype exists within the speech area. IEPs for 18% of the self-contained placements included present level statements in the area of speech.

Annual goals appeared most frequently within the areas of reading (80%), math (55%), motor skills (28%), and emotional/behavioral (30%). Of these high frequency areas, a significant relationship exists between annual goals and program protoype in math, motor skills, and the emotional/behavioral area. IEPs for 66% of the self-contained placements included annual goals in math. IEPs for 39% of the self-contained placements included annual goals in the motor skills area. IEPs for 43% of the self-contained placements and 42% of the out-of-district placements included annual goals in the emotional/behavioral area.

Annual goals appeared with some regularity in the areas of speech (13%), vocational/prevocational (11%) and self-help skills (9%). A significant relationship exists between annual goals in these areas and program prototype. IEPs from out-of-district placements included proportionately more annual goals in the areas of speech (19%), vocational/prevocational (31%), general academic (27%) and self-help skills (40%) than did resource and self-contained placements.

Short-term instructional objectives appeared most frequently within the areas of reading (72%), math (51%), motor skills (22%) and emotional/behavioral (18%). A significant relationship exists between short-term objectives in these areas and program prototype. The probability of a short-term objective in these four areas increases with the intensity of the program prototype. Proportionately more short-term objectives were included within these areas in IEPs of

self-contained placements than in IEPs of resource placements.

Short-term objectives were included in 13% of the IEPs in the area of speech and in 11% of the IEPs in the self-help area; significant relationships between short-term objectives and program prototype exist in these instructional areas. Again, the probability of short-term objectives in speech and self-help skills increases with the intensity of the program prototype.

Evaluative criteria, procedures, and schedules are required to determine the degree to which short-term objectives are being approximated by student performance. Short-term objectives which include a logical statement of expected behavior to an acceptable standard (STO LSEBAS) may include evaluative criteria and procedures. Short-term objectives which included a logical statement of expected behavior to an acceptable standard appear in IEPs most frequently within the areas of reading (52%), math (37%), motor skills (19%), and emotional/behavioral (12%). A significant relationship between such short-term objectives and program prototype exists in each of these instructional areas. In all areas the probability of such objectives being included in IEPs increases with the intensity of the program prototype.

Dates were included with short-term objectives most frequently within the areas of reading (58%), math (41%), and emotional/behavioral (10%). A significant relationship between such objectives and program prototype in these instructional areas exists. IEPs of students enrolled in self-contained

programs included proportionally more objectives with dates than did IEPs of students enrolled in resource and out-of-district programs.

THE IEP AND SCHOOL ORGANIZATIONAL PATTERN

Relationships between IEP content and school organizational patterns (preschool, elementary, junior high, senior high, and out-of-district) were investigated. Present level statements, annual goals, and short-term objectives are presented within instructional areas in Table 6. The remaining IEP components follow Table 6 in narrative form.

INSERT TABLE 6 HERE

Placement recommendations appeared in 94% of the IEPs; no significant relationship between inclusion of the placement recommendation and the school organizational pattern was established.

A placement rationale was present in 39% of the IEPs; a significant relationship between inclusion of a placement rationale and school organizational pattern was noted, $X^2(8)=29.893$, $p<.001$, $C=.3547$. The location of out-of-district

placements (85%) was most frequently included in IEPs. The location of pre-school placements was least frequently included in IEPs (29%).

Program initiation dates were present in 89% of the IEPs, but no significant relationship between the presence of initiation dates and school organizational pattern was noted.

The anticipated duration of services was clearly stated in 74% of the IEPs. A significant relationship between the presence of anticipated duration dates and school organizational pattern was demonstrated, $X2(16)=100.073$, $p<.001$, $C=.4580$. Anticipated duration dates appeared most frequently in IEPs at the senior high school (93%) and junior high school levels (90%). These dates appeared least frequently in IEPs at the preschool level (29%).

Related services were described in 35% of the IEPs; a significant relationship between identification of related services and school organizational pattern was noted, $X2(4)=16.836$, $p<.01$, $C=.2067$. Related services were described most frequently in IEPs at the junior high school level (53%) and described least frequently in IEPs of out-of-district placements (17%).

The extent of student participation in regular classes was indicated in 20% of the IEPs; a significant relationship between descriptions of student participation in regular classes and school organizational pattern exists, $X2(4)=16.193$, $p<.01$, $C=.2029$. Participation in regular classes was most frequently indicated at the senior high school (34%)

and not identified at the pre-school level.

Present level statements appeared most frequently within the areas of reading (83%), math (67%), motor skills (31%), and emotional/behavioral (27%). A significant relationship exists between present level statements in the areas of reading, motor skills, and emotional/behavioral and school organizational pattern. Ninety percent of IEPs at the junior high school level included present level statements in reading; 59% of IEPs at the pre-school level included present level statements in the motor skills area. Sixty percent of IEPs in the out-of-district level included present level statements in the emotional/ behavioral area.

Present level statements frequently were included in the general academic (21%), self-help skills and speech areas (10%). A significant relationship exists between present levels in these areas and the school organizational pattern. IEPs for 27% of the out-of-district placements contained present level statements in the general academic areas. No IEPs at the pre-school level included present level statements in the general academic area. Thirty-five percent of the IEPs at the pre-school level contained present level statements in speech; 3% of the IEPs at the high school level included present level statements in speech. Most self-help skill present level statements are included in the out-of-district (31%) and pre-school (18%) levels.

Annual goals appeared most frequently in the areas of reading (80%), math (55%), emotional/behavioral (29%), motor

skills (28%), speech (13%), and vocational/prevocational (11%). Significant relationships were demonstrated among annual goals in all aforementioned areas except reading and school organizational pattern. IEPs at the junior high (75%) and senior high (70%) levels contained proportionately more annual goals in math than did IEPs at other levels. Annual goals were most frequently included within out-of-district (42%) and pre-school (47%) levels and least frequently included at the senior high in the emotional/behavioral area. Fifty-three percent of the IEPs at the preschool level included annual goals in the motor skills area; 10% of the high school level IEPs included annual goals in motor skills. Thirty-five percent of the pre-school IEPs and 7% of the high school IEPs included annual goals in speech. Annual goals in the vocational/ prevocational area were included in 31% of the out-of-district IEPs and 23% of the high school IEPs; vocational/prevocational goals were not contained in IEPs at the elementary and preschool levels.

Short-term objectives appeared most frequently in the reading (72%), math (51%), motor skills (22%), and emotional/behavioral (18%) areas. Significant relationships between the inclusion of short-term objectives and the school organizational pattern were demonstrated in all the aforementioned areas except reading. Math objectives appeared most frequently at the out-of-district (69%), senior high (69%), and junior high (62%) levels and least frequently at the pre-school (12%) level. Motor skills objectives were present

most frequently at pre-school (41%) and out-of-district levels (38%) and least frequently at the junior high (8.3%) and senior high (8.6%) levels. Emotional/behavioral objectives were present most frequently at out-of-district (44%) and pre-school (29%) levels and least frequently at the senior high (6%) level.

Short-term objectives which included a logical statement of expected behavior to an acceptable standard were present most frequently in reading (58%), math (41%), motor skills (13%) and emotional/behavioral (10%) areas. Significant relationships between such objectives and the school organizational pattern were demonstrated in all aforementioned areas except reading.

Math objectives appeared least frequently in preschool IEPs (12%) and at about the same level of frequency at all other levels. Motor skills objectives were present most frequently in preschool (41%) and out-of-district (33%) IEPs and least frequently in junior high (7%) and senior high (4%) level IEPs. Emotional/behavioral objectives were present most frequently at the preschool level and least frequently at the junior high (3%) and senior high (1%) levels.

Short-term objectives with dates appeared most frequently in the reading (53%), math (37%), motor skills (19%) and emotional/behavioral (12%) areas. The out-of-district level most frequently included objectives with dates in all the aforementioned instructional areas. The pre-school level least frequently included objectives with dates in the aforementioned

instructional areas.

DISCUSSION

Internal consistency within the special education referral, planning and placement process and within the individualized education program was investigated with a representative sample of 405 students enrolled in special education. Referral information was available for review in 238 cases; psychoeducational assessment information was available for review in 390 cases. Individualized education programs were available for analysis in 377 cases. Tenuous relationships existed between reasons for referral and psychoeducational assessment results. Present level and annual goal components of the IEP were related to assessment results with variable strength. Short-term objectives were related to assessment results in four of fifteen instructional areas.

Relationships existed between present level statements and annual goals in all instructional areas for which statistical assumptions could be satisfied. Thirty-one percent of the present level statements (350/1138) did not have a goal within the same instructional area; 27% percent of the annual goals (288/1076) did not have a present level statement in the same instructional area. A logical statement of expected behavior to an acceptable standard was included in annual goals within 57% of the instructional areas. Short-term objectives represented sequential increments between present level

statements and annual goals in 39% of the instructional areas.

Significant, but generally weak, relationships existed between present level statements in three instructional areas, annual goals in seven instructional areas, short-term objectives in seven instructional areas and program prototypes. Patterns within these relationships are elusive. Because short-term objectives infrequently include logical statements of expected behavior to acceptable standards and targeted completion dates, their use as performance standards is very limited. IEP components in self-help skills and emotional/behavioral areas increase with the intensity of the program prototype.

Significant though limited relationships exist between school organizational patterns and present level statements, annual goals, and short-term objectives. These IEP components are most frequent in the motor skills area for preschoolers; goals and objectives are most frequent in the math area for junior high and senior high school students. Other patterns are difficult to isolate. Information about placement, related services, and extent of participation in regular classes is conspicuous in its absence.

An enormous amount of referral information was not available for review and analysis. Referral information provides entry into the special education planning and placement process; additionally, it provides the basis for selection of assessment procedures and techniques. Conscious efforts to improve the effectiveness of the SPED referral,

referral, planning and placement process require indices of its performance at critical intervals. Absence of referral information limits judgements about the effectiveness of organizational alternatives within the referral, planning, and placement process. In fact the effectiveness of organizational alternatives within the referral process (i.e., building-based, centralized, differentiated) cannot be established in the absence of referral information.

Relationships between reason for referral and assessment results require strengthening . Collaborative efforts among general and special educators in presenting referral information may increase its usefulness. When written referral information is supplemented with oral presentations by those who initiated the referral, greater definition of referral reasons may result. As the reasons for referral acquire greater clarity, the practice of administering standard psychoeducational batteries should decrease. To increase the instructional utility of assessment results,alternatives to the norm-referenced tests must be explored. Greater use should be made of students' previous learning experiences, structured observational schedules, and criterion-referenced tests . As Duffy and his colleagues (1981) note, "Skill development levels should be routinely assessable....Assessment would then be based on the actual service provided by the schools: the teaching of a curriculum". Instructionally relevant assessment information is not collected regularly. The questionable testing practices and over testing practices currently employed

suggest the need for definitive local assessment policy.

If a diagnostic-prescriptive teaching process is to be practiced in special education, relationships between psychoeducational assessment results and the content of IEPs must be strengthened. Present level statements should be written only in those areas which require specially designed instruction. They should be written so as to indicate the levels at which to initiate specially designed instruction. Annual goals should be written as student performance standards in each instructional area for which a present level statement exists. Short-term objectives should reflect sequentially incremental performance standards between present level statements and annual goals. When these guidelines are followed, IEP components provide instructionally relevant indices of student need.

Placement in a special education program then could be based upon these instructionally relevant indices of student need.Often students' needs change in relation to their chronological age. The content of specially designed instruction within school organization patterns should reflect the changing needs of handicapped students.

To be used as a management tool, IEPs must identify instructionally relevant indices of student need and those resources responsive to student need. Effects of resources on student performance must be determined. When the information is aggregated across IEPs, informed decisions about resource acquisition/allocation may be made. Basing these management

decisions on data aggregated across current IEPs will create problems rather than solutions.

Educational policy has influenced both the structure and professional practices within the special education referral, planning and placement process. The individualized education program is a direct result of Federal policy in special education. However, when these processes and programs are reviewed for their internal consistency, significant implementation difficulties surface.

Internal consistency within processes and programs can be enabled by policy formulated at the school district level with those who must implement it. Only locally formulated policy can consider the many demographic, economic, and political factors which influence implementation.

Changes in professional performance often are required to implement local policy. Supervision, consultation, and inservice education must be provided to elevate performance consistent with that required by local policy. Orchestrated policy development and professional development can increase the internal consistency of both the special education referral, planning, and placement process and the individualized education program. With increased internal consistency will come increased utility.

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